

**MICROPROCESSOR INCLUDING CONTROLLER
FOR REDUCED POWER CONSUMPTION AND
METHOD THEREFOR**

ABSTRACT OF THE DISCLOSURE

- 5 A microprocessor, method and signal-bearing medium for storing a
program for executing the method, includes a microcode unit for outputting
control signals, for each of a plurality of instructions, required by the
microprocessor for executing the instructions. The microcode unit includes an
instruction address input for receiving an instruction address, a control
10 variable input for receiving a control variable corresponding to a current state
of the microprocessor, a control signal input for receiving all of the control
signals output by the microcode unit for an immediately preceding instruction,
and a plurality of embedded logic circuits each dedicated for evaluating one
unique type of instruction received by the microcode unit.